



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,676	03/26/2004	Jian Gu	60091.00282	7872
32294 7590 03/17/2008 SQUIRE, SANDERS & DEMPSEY L.L.P. 8000 TOWERS CRESCENT 14TH FLOOR TYSONS CORNER, VA 22182-2700				
EXAMINER				
YUN, EUGENE				
ART UNIT		PAPER NUMBER		
2618				
MAIL DATE		DELIVERY MODE		
03/17/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/809,676

Applicant(s)

GU ET AL.

Examiner

EUGENE YUN

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Sampath (0-7803-3659-3/97 "IDS").

Referring to Claim 1, Sampath teaches a method comprising:

determining a quality of a received coding block (see first paragraph of 2nd col. of pg. 930);

storing samples of differences between a measured SIR value and a target SIR value (see last 2 paragraphs of 2nd col. of pg. 931);

adjusting the target SIR value based on values of the samples of the differences between the measured SIR value and the target SIR value, and the quality of the received coding block (see last 10 lines of 2nd col of pg. 929); and

providing a transmit power control command based on the adjusted target SIR value to the user equipment (see first 3 lines of second column on pg. 929).

Claims 15 and 29 have similar limitations as claim 1.

Referring to Claims 2 and 16, Sampath also teaches adjusting the target SIR value by reducing the target SIR value by a predetermined down step value when decoding of the received coding block succeeds, and a difference of the differences

between the measured SIR value and the SIR target value is smaller than a threshold that is defined for the measured SIR value minus the target SIR value for a fraction of time slots (see middle paragraph of col. 1 of pg. 930).

Referring to Claims 3 and 17, Sampath also teaches adjusting the target SIR value by reducing the target SIR value by a predetermined down step value when decoding of the received coding block succeeds, and a sum of the differences between the measured SIR value and the target SIR value is smaller than a negative value threshold that is defined for the measured SIR value minus the target SIR value (see middle paragraph of col. 1 of pg. 930).

Referring to Claims 4 and 18, Sampath also teaches the adjust target SIR value greater than or equal to a local minimum target SIR value (see lines 15-25 of col. 2 of pg. 930).

Referring to Claims 5 and 19, Sampath also teaches adjusting the target SIR value by adding a target SIR value up step value to the target SIR value when decoding of the received coding block fails and a difference of the differences between the measured SIR value and the SIR target value is smaller than a threshold that is defined for the measured SIR value minus the target SIR value for a fraction of time slots (see last 2 paragraphs of 2nd col. of pg. 931).

Referring to Claims 6 and 20, Sampath also teaches adjusting the target SIR value by adding a target SIR value up step value when decoding of the received coding block fails and a sum of the differences between the measured SIR value and the target

SIR value is smaller than a negative value threshold that is defined for the measured SIR value minus the target SIR value (see last 2 paragraphs of 2nd col. of pg. 931).

Referring to Claims 7 and 21, Sampath also teaches up step target SIR value comprising a negative, positive or zero value (see lines 15-25 of col. 2 of pg. 930).

Referring to Claims 8 and 22, Sampath also teaches the adjusted target SIR value greater than or equal to a local minimum target SIR value and smaller than or equal to a local maximum target SIR value (see lines 15-25 of col. 2 of pg. 930).

Referring to Claims 9 and 23, Sampath also teaches adjusting the target SIR value by reducing the target SIR value by a predetermined target SIR down step value of outer loop power control when decoding of the received coding block succeeds and a difference of the differences between the measured SIR value and the SIR target value is larger than a threshold that is defined for the measured SIR value minus the target SIR value for a fraction of time slots (see middle paragraph of col. 1 of pg. 930).

Referring to Claims 10 and 24, Sampath also teaches adjusting the target SIR value by reducing the target SIR value by a predetermined target SIR down step value of outer loop power control when decoding of the received coding block succeeds and a sum of the differences between the measured SIR value and the target SIR value is larger than a negative value threshold that is defined for the measured SIR value minus the target SIR value (see middle paragraph of col. 1 of pg. 930).

Referring to Claims 11 and 25, Sampath also teaches the adjusted target SIR value greater than or equal to a global minimum target SIR value (see lines 15-25 of col. 2 of pg. 930).

Referring to Claims 12 and 26, Sampath also teaches adjusting the target SIR value by adding a target SIR up step value of outer loop power control to the target SIR value when decoding of the received coding block fails and a difference of the differences between the measured SIR value and the SIR target is larger than a threshold that is defined for the measured SIR value minus the target SIR value for a fraction of time slots (see last 2 paragraphs of 2nd col. of pg. 931).

Referring to Claims 13 and 27, Sampath also teaches adjusting the target SIR value by adding a target SIR up step value of outer loop power control to the target SIR value when decoding of the received coding block fails and a sum of the differences between the measured SIR value and the target SIR value is smaller than a negative value threshold that is defined for the measured SIR value minus the target SIR value (see last 2 paragraphs of 2nd col. of pg. 931).

Referring to Claims 14 and 28, Sampath also teaches the adjusted target SIR value is smaller than or equal to a local maximum target SIR value (see lines 15-25 of col. 2 of pg. 930).

Response to Arguments

3. Applicant's arguments filed 12/7/2007 have been fully considered but they are not persuasive.

The applicant argues that the Sampath reference does not teach "storing samples of differences between a measured SIR value and a target SIR value" and

"adjusting the target SIR value based on values of the samples of the differences between the measured SIR value and the target SIR value, and the quality of the received coding block". Regarding the further arguments as to why the Sampath reference does not teach the above limitations, the applicant simply states that "instead, Sampath discloses that the target SIR is adjust based on the FER. The second paragraph of Col. 2 of Sampath discloses that using a fixed SIR target is inefficient and would result in diminished system capacity".

Firstly, there is no indication in the claims that the target SIR is fixed. It is clearly known to one skilled in the art that the target SIR can be fixed or variable, just like the target SIR in the Sampath reference. Therefore, since the claims do not specifically state whether the target SIR is fixed or variable, the examiner can assume either.

Secondly, it is also known to one skilled in the art that the frame error rate (FER) can be determined by measuring received frames according to a target SIR. Therefore, the examiner points to the FER in the Sampath reference in order to read on the "samples of differences between a measured SIR value and a target SIR value".

For the above reasons, the examiner still believes that the Sampath reference teaches "storing samples of differences between a measured SIR value and a target SIR value" and "adjusting the target SIR value based on values of the samples of the differences between the measured SIR value and the target SIR value, and the quality of the received coding block".

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EUGENE YUN whose telephone number is (571)272-7860. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571)272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eugene Yun
Examiner
Art Unit 2618

/E. Y./
Examiner, Art Unit 2618

/Matthew D. Anderson/
Supervisory Patent Examiner, Art Unit 2618